

GUIDANCE SYSTEM AND METHOD FOR SURGICAL PROCEDURES WITH
IMPROVED FEEDBACK

ABSTRACT OF THE DISCLOSURE

It is often desirable to define objects with respect to images of an anatomy displayed using an image guided surgery system. For non-trivial objects, or those with complicated two or three dimensional forms, it may be difficult to present information in a manner that is simple for a user to understand. The local distance to a surface of interest, such as the surface of the defined object, or to a desired position, the local penetration distance of the surface of interest, or haptic repulsion force, often provides the most useful information for augmenting the interaction of the user with the image guided surgery system. The scalar value of the local distance may be conveyed to the user by visual, audio, tactile, haptic, or other means.